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CENTER FOR HEALTH INFORMATION MANAGEMENT & EVALUATION
JEFFERSON CITY, MISSOURI 65102-0570
(573) 751-6272

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Trends in Missouri Fertility Rates

While recent trends in Missouri total fertility rates have been fairly constant (varying by 3 percent from 1990 to 2002), there have been large shifts in age- and race-specific rates. Total fertility rate refers to the average number of births a woman would have if a given set of age-specific rates applied throughout her reproductive years, and age-specific fertility rates refer to births to females of a given age group per 1,000 females of same age group. Fertility rates for women under 30 (particularly under age 20) have declined since 1990, and rates for women aged 30 or more have substantially increased since 1975. Fertility rates for African-American women decreased 17.5 percent from the five-year period, 1988-1992, to 1998-2002 while rates for white women increased by 6.5 percent. This article examines some of the trends in fertility rates by age and by race and geographically in the most recent decade, based on 5 year periods, as well as some earlier decades.

Table 1 shows fertility rates by age for selected important years in Missouri fertility. The baseline year (1911) is the earliest year data are available

Table 1
Total and Age-Specific Fertility Rates: Missouri 1911-2002

	Total Fertility Rates	*15-19*	*20-24*	*25-29*	*30-34*	*35-39*	*40-44*
1911	2.71	48.8	134.2	133.5	109.6	77.7	33.5
1935	1.99	52.5	116.0	96.9	69.3	43.6	16.8
1960	3.63	99.0	254.4	187.5	110.5	56.5	16.5
1975	1.76	60.0	110.1	106.6	51.1	18.8	4.6
1990	2.00	62.7	118.9	117.3	70.5	25.3	4.1
2000	2.00	48.6	115.2	115.4	82.9	31.4	5.8
2002	1.94	44.0	108.1	113.9	82.4	32.8	5.9

Notes: Total fertility rate refers to the average number of births a woman would have if a given set of age-specific rates applied thoughout her reproductive years, and age-specific rates refer to number of births to females of a given age group per 1,000 females of the same age group.

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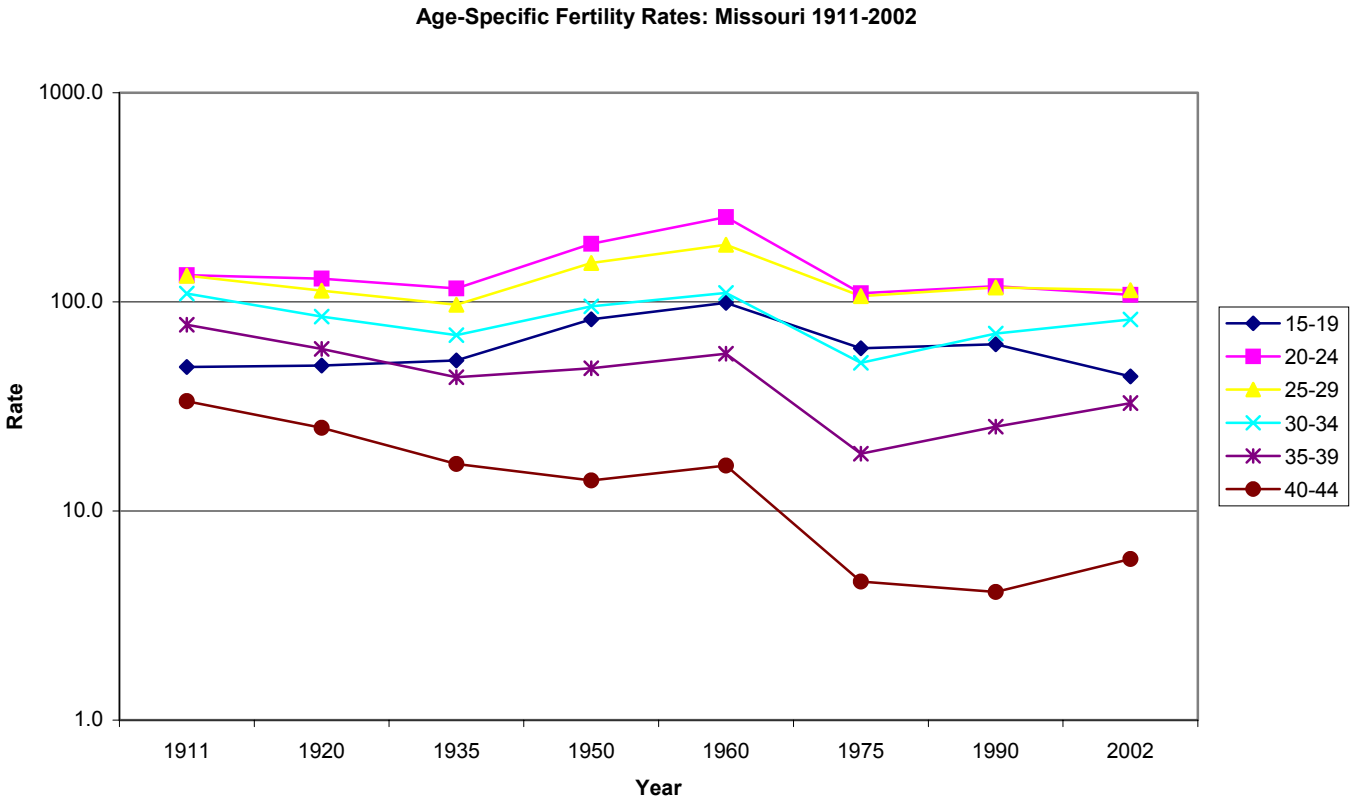

and also a year when fertility was relatively high (2.71 per woman of reproductive age). In 1935, mid-way through the Depression, total fertility was low (1.99). By 1960, the peak year of the baby boom, fertility climbed to 3.63. This was followed by the "baby bust" year of 1975, when fertility reached a low of 1.76. In more recent years (1990, 2000 and 2002) fertility has stabilized around 2 births per woman.

Teen-age (15-19) fertility rates declined by nearly 30 percent from 1990 to 2002. The 2002 rate of 44 per 1,000 females aged 15-19 is the lowest teen-aged fertility rate on record. Since most teen fertility is unintended, the rate could still go lower. The peak years of fertility for most women are 20-29. The fertility rates for women 20-24 and 25-29 has been surprisingly consistent throughout the last century except during the baby boom years, when one in four women 20-24 and one in five women aged 25-29 gave birth each year around 1960.

Fertility has substantially increased for women aged 30 or more during the last quarter century, as more and more women are postponing marriage and childbirth to start careers. During the period 1975-2002, fertility increased for women aged 30-34 by 61 percent, from 51.1 to 82.4 per 1,000 females. For women aged 35-39 the increase was 74 percent, from 18.8 to 32.8, and for women aged 40-44 the increase was 28 percent. However the rates for women aged 30 and above are still lower than they were during the baby boom years.

Table 2 compares Missouri and United States fertility rates by age for the time periods 1988-1992 and 1998-2002. Missouri overall rates were slightly below the national rates for both periods (3.5 percent lower in 1988-1992 and 2 percent lower in 1998-2002). Generally, Missouri fertility rates were slightly higher than national rates for women under age 30 (except for females under age 15) and substantially lower for women aged 30 or more. A higher proportion of Hispanic births nationally compared to that at the state level probably explains some of these patterns. As Table 3 shows, Hispanic women generally have a higher total fertility rate than other races and higher rates for most age groups. In 2002 more

than one in five births in the nation were Hispanic, compared with one in 22 in Missouri.

The divergent trends in Missouri white and African-American fertility during the previous decade are illustrated in Table 3. From 1988-1992 to 1998-2002, white fertility increased by 6.5 percent from 1.85 to 1.97, while African-American fertility decreased by 17.5 percent from 2.68 to 2.21. For the younger age groups, African-American women experienced a larger decrease in fertility than their white counterparts, while for the age group 30-44, African-American women experienced a smaller increase. African-American women still had a higher total fertility rate than white women during 1998-2002, but the differential decreased from 45 percent in 1988-1992 to just 12 percent in 1998-2002. During the most recent five-year period (1998-2002), Hispanic women had a fertility rate 38 percent higher than white women and 23 percent higher than African-American women. Comparing African-American fertility to Hispanic fertility by age, both had very similar rates under age 25, but Hispanic women had distinctly higher fertility rates for women aged 25 or more. Trend data could not be calculated for Hispanic women since data were not available in the previous decade. The percent changes for the under 15 and 45+ age groups should be interpreted with caution because of small numbers.

Map 1 illustrates geographically where the highest and lowest fertility rates were in the state during the most recent available five year period, 1998-2002. The highest rates were scattered throughout rural areas of the state. The three counties (Sullivan, Daviess and Knox) with the highest total fertility rate (2.64) are all located in rural northern Missouri. The next two highest at 2.52, Webster and McDonald, are located in southwestern Missouri. McDonald and Sullivan counties have large Hispanic populations, while Daviess and Webster counties have large Amish populations.

Four of the five counties with the lowest fertility rates occurred in counties with large university or college populations. These included Boone (1.47), Nodaway (1.48), Adair (1.55), and Cape Girardeau (1.67). The one exception is Ralls (1.63). These counties, with the exception of Ralls, have large populations of young unmarried women (ages 18-

Table 2
Total and Age-Specific Fertility Rates
Missouri and United States 1998-92 and 1998-02

	Missouri			*United States*		
	1988-92	1998-02	Percent Change	1988-92	1998-02	Percent Change
<15	1.1	0.7	-36.4	1.4	0.9	-35.7
15-19	60.6	47.7	-21.3	58.5	47.0	-19.7
20-24	119.0	113.8	-4.4	113.9	107.2	-5.9
25-29	113.4	114.6	1.1	117.0	112.4	-3.9
30-34	69.1	82.4	19.2	78.4	89.4	14.0
35-39	24.8	30.9	24.6	30.8	39.3	27.6
40-44	4.0	5.6	40.0	5.4	7.8	44.4
45+	0.1	0.3	200.0	0.2	0.5	150.0
Total Fertility Rate	1.96	1.98	1.0	2.03	2.02	-0.5

Notes: Total fertility rate refers to the average number of births a woman would have if a given set of age-specific rates applied throughout her reproductive years, and age-specific rates refer to number of births to females of a given group per 1,000 females of the same age group.

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Table 3
Total and Age-Specific Fertility Rates by Race and Hispanic Origin: Missouri 1988-92 and 1998-02

	White			*African-American*			*Hispanic*
	1988-92	1998-02	Percent Change	1988-92	1998-02	Percent Change	1998-02
<15	0.5	0.4	-20.0	5.2	2.2	-57.7	1.6
15-19	48.7	41.1	-15.6	137.0	88.6	-35.3	80.3
20-24	109.4	107.5	-1.7	186.3	155.3	-16.6	158.0
25-29	112.9	122.0	8.1	116.5	99.1	-14.9	144.4
30-34	69.9	85.3	22.0	61.4	65.7	7.0	100.6
35-39	24.6	31.2	26.8	24.2	25.0	3.3	47.2
40-44	3.9	5.6	43.6	4.6	5.3	15.2	10.1
45+	0.1	0.3	200.0	0.1	0.3	200.0	1.0
Total Fertility Rate	1.85	1.97	6.5	2.68	2.21	-17.5	2.72

Notes: Total fertility rate refers to the average number of births a woman would have if a given set of age-specific rates applied thoughout her reproductive years, and age-specific rates refer to number of births to females of a given age group per 1,000 females of the same age group.

24) at lesser chance of becoming pregnant than women of the same age living in other counties, many more of whom are married.

Geographic trends by regional planning commission area (RPC) are displayed in Table 4. Despite the small increase in total fertility statewide of 1 percent, 15 of the 19 RPCs had an increase in fertility during the decade from 1988-1992 to 1998-2002. The four exceptions are East West Gateway (St. Louis area), Lake of the Ozarks, Mo Kan (St. Joseph area), and the Bootheel. The largest decrease in the state occurred in St. Louis City (-22.5 percent). In 1988-92, St. Louis City was in the top quartile of the state, while in the most recent five-year period, the city's fertility rate dropped to the lowest quartile. This is due to the large decrease in African-American fertility. The largest fertility increases occurred in Northeast (16.7 percent), Rest of Mid America (suburban Kansas City, 13.3 percent), and Harry S Truman (Joplin area, 11.3 percent).

In summary:

- Missouri total fertility rates increased very slightly in the last decade.
- Teen fertility decreased to its lowest level ever recorded.
- Fertility for women aged 30 or more reached its highest level since the 1960s.
- Fertility increased among whites and decreased among African-Americans during the last decade.
- Hispanic women have the highest fertility rates, followed by African-Americans.
- Fertility rates were highest in selected rural counties of the state and lowest in counties with large university populations.

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Map 1

Total Fertility Rates by County: Missouri 1998-2002

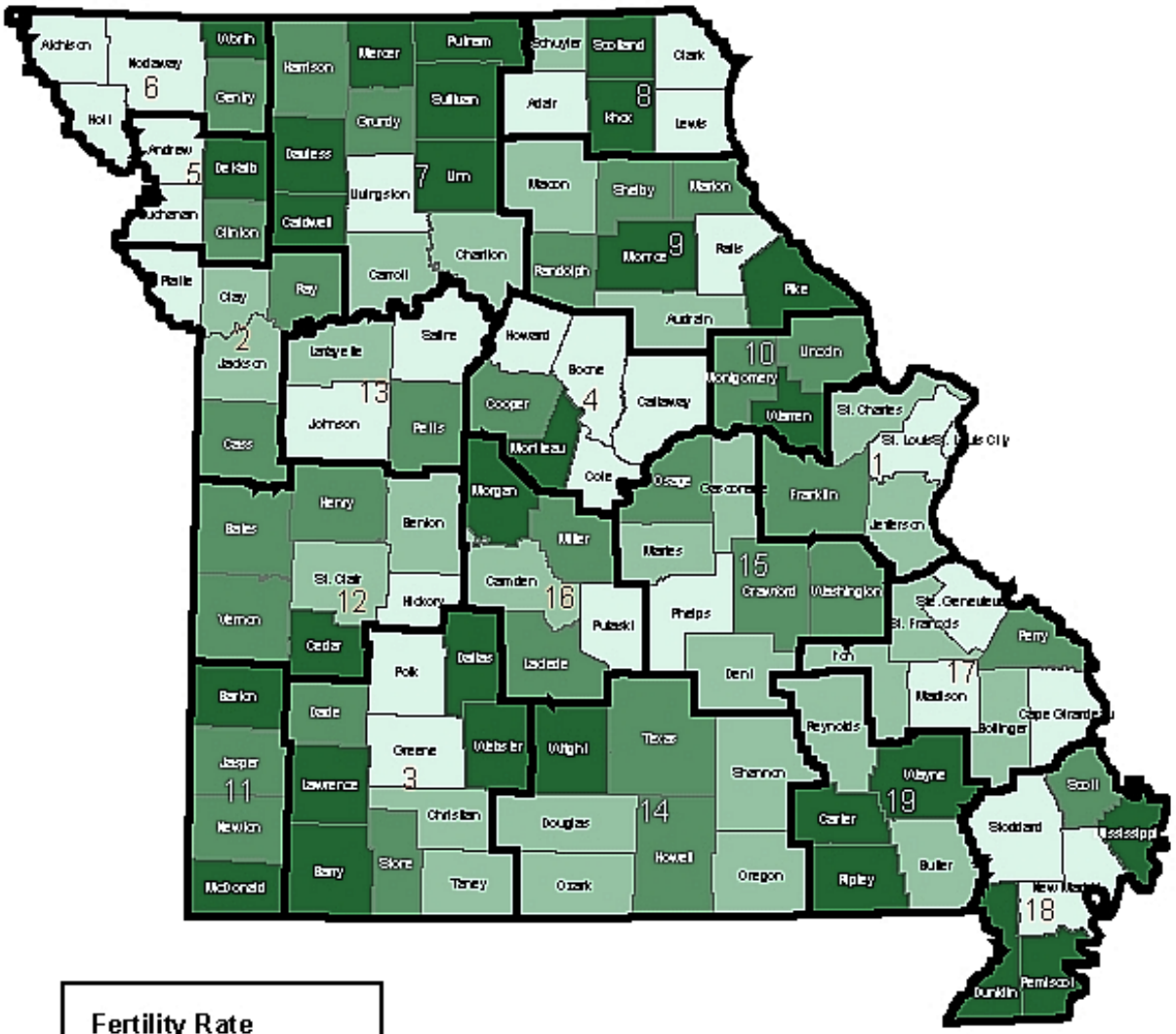

Table 4
Total Fertility Rates by Regional Planning Commission: Missouri 1988-92 and 1998-02 per 1,000 females

	Total Fertility Rate		*Percent*
	1988-92	*1998-02*	*Change*
Major Metro Regions			
St Louis City	2.53	1.96	-22.5
St Louis County	1.82	1.85	1.6
Rest of E W Gateway	2.02	2.09	3.5
East West Gateway	2.03	1.94	-4.4
Jackson County	2.12	2.13	0.5
Rest of Mid America	1.81	2.05	13.3
Mid America	2.02	2.10	4.0
Minor Metro Regions			
Greene County	1.56	1.69	8.3
Rest of Southwest	2.04	2.17	6.4
Southwest	1.75	1.89	8.0
Boone County	1.46	1.47	0.7
Rest of Mid Missouri	1.88	1.94	3.2
Mid Missouri	1.61	1.63	1.2
Buchanan County	2.01	1.93	-4.0
Rest of Mo Kan	1.98	2.12	7.1
Mo Kan	2.00	1.97	-1.5
Jasper County	1.97	2.22	12.7
Rest of Harry Truman	2.11	2.33	10.4
Harry S Truman	2.03	2.26	11.3
Nonmetro Regions			
Northwest	1.49	1.54	3.4
Green Hills	2.15	2.26	5.1
Northeast	1.44	1.68	16.7
Mark Twain	2.09	2.13	1.9
Boonslick	2.27	2.28	0.4
Kaysinger Basin	2.06	2.16	4.9
Pioneer Hills	1.78	1.92	7.9
South Central Ozarks	2.13	2.19	2.8
Meramec	1.98	2.05	3.5
Lake of the Ozarks	2.24	2.10	-6.3
Southeast	1.82	1.87	2.7
Bootheel	2.19	2.18	-0.5
Ozark Foothills	2.08	2.19	5.3
Major Metro	2.03	2.00	-1.5
Minor Metro	1.76	1.87	6.3
Nonmetro	1.97	2.01	2.0
Missouri Total	1.96	1.98	1.0

Notes: Total fertility rate refers to the average number of births a woman would have if a given set of age-specific rates applied thoughout her reproductive years, and age-specific rates refer to number of births to females of a given age group per 1,000 females of the same age group.